

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-004133**Date Inspected:** 10-Oct-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Huang Wen Pang and Lvliqing			CWI Present:	Yes	No	
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No	N/A
				Delayed / Cancelled:	Yes	No	N/A
Bridge No:	34-0006			Component:	OBG and SAS Tower Fabrication		

Summary of Items Observed:

On this date, Caltrans Office of Structural Material (OSM) Quality Assurance (QA) Inspector Joselito Lizardo was present as requested to perform observations on the fabrication of Orthotropic Box Girder (OBG) and SAS Tower at Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China.

The QA Inspector has randomly observed the following activities on sub-assembly Bays mentioned below;

Bay 7: OBG - Floor Beam Sub Assembly

The QA Inspector randomly observed ZPMC welder Duan Xin Zhi ID Number 050502 utilizing the SAW Process in the 1G (Flat Groove) Position with ZPMC WPS WPS-B-T-2221-B-L2c-S-2, to weld the cover pass on 14mm:18mm unequal thickness plate splice butt joint of floor beam sub-assembly FB028-006-079. QA Inspector randomly observed ZPMC CWI Huang Wen Pang monitoring weld parameters.

This QA Inspector randomly observed ZPMC welder Hong Shuili ID #044815 utilizing the FCAW Process in the 2G (Hor. Groove) Position with WPS-B-T-2232-Tc-U4b-F and a 1.4mm diameter electrode, filler metal brand E71T-1, class Supercored 71H, semi automatic to weld fill pass on web plate to flange tee joint on floor beam FB010-019-045. The QA Inspector randomly observed ZPMC CWI Huang Wen Pang monitoring preheat and weld parameters.

FCAW(2F) fillet welding on stiffener to web plate FB012-017-weld joints 013/014 and flange to web plate on various welded spacer beam (W51/2" x 251/2") FB006-082 weld joints 011/012 utilizing the FCAW Process with a 1.4mm diameter electrode, filler metal brand E71T-1, class Supercored 71H following WPS-B-T-2132-3 and

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WPS-B-T-2232-3 respectively this QA observed. ZPMC welder Han Kun ID #066751, and Chen Chuanzong ID #044824 and Qi Huan Huan ID #067184 were seen performing the task respectively.

Bay 8: Tower Diaphragm

This QA observed ZPMC welders ID #068924, ID #037997, ID #066456 and 066457 SMAW(2G) PJP welding fill pass on 40mm web plate to (bottom) tower double diaphragm NSD1-SA169B/B weld joints 11 and 12. ZPMC welders were noted utilizing Excalibur E9018M H4R, 4.8mm diameter electrode following WPS-B-T-3312-Tc-P5. The QA Inspector randomly observed ZPMC CWI Liu Hua Jie monitoring weld parameters.

The QA Inspector randomly observed ZPMC welder Xie Lian Feng ID Number 045247 utilizing the SAW Process in the 1G (Flat Groove) Position with ZPMC WPS WPS-B-T-3221-B-U3c-S-1, to weld the fill pass on 75mm plate splice butt joint of tower diaphragm plate ESD1-SA414A/B-1B. QA Inspector randomly observed ZPMC CWI Lvliqing monitoring weld parameters.

Heat straightening was also observed on 75mm thick tower diaphragm plate ESD1-SA415 weld joints 1A/1B and SSD1-SA325 due to welding distortion. Natural gas was used with thermal heat input of less than 650 and 600 degree C following procedure HSR1(T)-4845 and HSR1(T)-4814 respectively.

Summary of Conversations:

No significant conversation occurred today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Joshua Ishibashi, (858) 232-7081, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo, Joselito	Quality Assurance Inspector
Reviewed By:	Cuellar, Robert	QA Reviewer
